

**REMARKS**

Claims 1-25 and 34-47 are pending in the application with new claims 34-47 added herein. Claims 1-25 stand provisionally rejected for double patenting over claims 1-26 of copending Application No. 09/652,532 ('532). Page 3 of the Office Action cites In re Schneller, 158 USPQ 210 (CCPA 1968) in support of the rejection. It thus appears that the rejection is based on the rare form of double patenting "limited to the particular set of facts set forth in that decision" instead of obviousness-type double patenting. MPEP 804(B)(2). Applicants request reconsideration.

Claim 1 of the present application sets forth a capacitor fabrication method that includes, among other features, atomic layer depositing a conductive barrier layer to oxygen diffusion over a first capacitor electrode formed over a substrate, forming a capacitor dielectric layer over the first electrode, and forming a second capacitor electrode over the dielectric layer. Page 2 of the Office Action alleges that claim 1 of '532 also sets forth a similar method, including atomic layer depositing a conductive barrier layer to oxygen diffusion. However, claim 1 of '532 instead sets forth atomic layer depositing an insulative barrier layer to oxygen diffusion. The term "conductive" is expressly defined in the present specification and the term "insulative" is expressly defined in the specification of '532 in manners that prevent overlapping subject matter in the two applications. Page 12, lines 13-22 of the present specification set forth an express definition of "conductive" material that excludes "insulative" material as such term is expressly defined at page 11, line 19 to page 12, line 2 of '532. Since claim 1 of the present application is directed to depositing a conductive barrier layer and claim 1 of

'532 is directed to depositing an insulative barrier layer, the subject matter of the two applications is mutually exclusive.

In re Schneller, 158 USPQ at 214-15 states that the appellant of such case "has the burden of establishing that the invention claimed in his patent is 'independent and distinct' from the invention of the appealed claims." In the present application, the claims are mutually exclusive of the '532 claims, indicating independence and distinctness. Therefore, it appears that the double patenting rejection is based on a faulty premise. The Office Action does not provide any basis for finding a double patenting rejection when claim 1 of the present application and claim 1 of '532 are properly interpreted as expressly written. Applicants note that the Schneller claims were not mutually exclusive since the patent claimed ABCX and the application rejected for double patenting claimed ABCXY. Id. at 216. Schneller double patenting should not be found here since this rare form of double patenting is "limited to the particular set of facts set forth in that decision." MPEP 804(B)(2).

Applicants also note that the fundamental reason for the Schneller rule is "to prevent unjustified time wise extension of the right to exclude." Id. at 214-15. The present application and '532 were filed on the same day and the Office Action does not provide any justification explaining why allowing the present claims would extend the right to exclude given the simultaneous filing.

Page 3 of the Office Action alleges that claim 13 of the present application and claim 13 of '532 also claim similar subject matter. However, Applicants assert that the same distinctions described above with regard to claim 1 are present in claim 13 of the

present application. In addition, claims 2-12 depending from claim 1 and claims 14-25 depending from claim 13 are not mentioned in the double patenting rejection.

Applicants note that claims 1-25 of the present application are not in exact correspondence with the subject matter of claims 1-26 of '532. Accordingly, the dependent claims cannot be rejected unless they are established by the Office as not "independent and distinct" in view of specific claims in '532.

At least for the reasons described herein, Applicants assert that claims 1-25 are patentable and request allowance of such claims in the next Office Action.

In the event that the double patenting rejection is intended to be obviousness-type but some error occurred in the Office Action, Applicants assert that no such rejection can be maintained. Pages 2-3 of the Office Action acknowledge that a distinction exists between the subject claims since claim 1 of '532 sets forth a barrier layer thickness of less than 10 Angstroms. The Office Action alleges that the distinction "is considered non-obvious." Since the additional limitation of barrier layer thickness is considered non-obvious, it is not seen how obviousness-type double patenting could be established. If the distinction is non-obvious, then the distinction should preclude obviousness-type double patenting. In addition, claim 1 of '532 has been further amended to limit the barrier layer to comprising aluminum oxide. Applicants assert that the additional limitation of barrier layer composition is also a non-obvious distinction, and it is further not seen how obviousness-type double patenting could be established.

As an additional matter, Applicants previously submitted an Information Disclosure Statement (IDS) on 25 January 2001 citing an article by Ott et al. The Office

returned the Form PTO-1449 with the Office Action of 6 July 2001 stating that the IDS was considered by the Examiner. However, the listing for Ott et al. was crossed out rather than initialed on the Form 1449 to indicate that such reference was considered. Applicants replied to the 6 July 2001 Office Action in a 9 October 2001 response and requested initialing of Ott et al. The Office has not yet addressed the Applicant's request. Included herewith, Applicants provide a copy of the IDS previously submitted on 25 January 2001 and request initialing of all references as considered and return of the Form 1449.

Applicants also wish to clarify the file history of the present 27 February 2002 Office Action by specifying that it should be considered to replace a previous 9 January 2002 Office Action. After receiving the 9 January 2002 Office Action, Applicant's attorney James Lake spoke with supervisory patent examiner David Nelms on 16 January 2002 in a telephone conference. Mr. Nelms agreed that the only art cited in the Office Action was not available pursuant to 35 USC 103(c) and indicated that a new action would be sent restarting the shortened statutory period. The 27 February 2002 Office Action does not specify that it replaces the previous Action and merely states that it was responsive to a Supplemental IDS filed on 17 January 2002. Applicants assert that the 9 January 2002 Office Action should be considered withdrawn in the absence of any contrary finding by the Office set forth in the next Office Action.

Applicants herein establish adequate reasons for patentability of all pending claims and request allowance of claims 1-25 in the next Office Action.

Respectfully submitted,

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